

Summary of fireworks-related injury surveillance for 12/30/2000 - 1/2/2001

**Background:* Passed in May of 2000, Act 117 requires health care facilities in Hawaii to report injuries caused by legal and illegal fireworks to the Department of Health (DOH) and county police departments. To facilitate this process, the Injury Prevention and Control Program (IPCP) of the DOH sent out a form to all hospital emergency departments (EDs) in the state (24 in total), to collect data on fireworks-related injuries over the 12/30/2000 to 1/2/2001 period. IPCP eventually received responses from 19 EDs, and learned of the status of 3 other EDs through the Health Care Association of Hawaii. The following report therefore includes information from all EDs in the state, except for two small, rural hospitals.

**Results:* A total of 67 injuries were treated at EDs in Hawaii, including 8 that were due to inhalation. Since this is somewhat of a non-specific etiology, these 8 inhalation injuries are not included in the following statistics. The geographic distribution of the 59 remaining injuries was:

Oahu: 43 injuries (73% of the total)

Hawaii: 10 injuries (17%)

Maui County: 5 injuries (8%)

Kauai: 1 injury (2%)

**Only 7 of the 59 (12%) victims were transported to EDs by Emergency Medical Services (EMS), and only 3 of the 59 (5%) victims were ultimately admitted to the hospital.*

**Forty-seven of the victims (80%) were male. The oldest victim was 74 years of age, but the rest were between 2 and 48 years of age. Eight victims (14%) were aged 5 years or younger, and nearly one-third (18, or 30%) were 10 years or younger.*

**About half of the victims (28, or 47%) were injured while setting off or holding the firework, and 23 others were injured while observing fireworks. (Status was unknown for the remaining 8 cases.)*

**Most of the injuries (43, or 73%) were burns. There were also 4 blast injuries, 4 punctures, and lower numbers of scratches and lacerations. Hands and arms were the most commonly injured body areas, accounting for 23 injuries. Eye injuries (16), and face injuries (9) were also common.*

**The type of firework causing the injury was noted for 47 of the 59 (80%) injuries. About half of these (23) were caused by firecrackers. (However, as one ED manager noted, reporters may use the word "firecracker" as a generalization of fireworks.) Seven injuries were caused by sparklers, and 3 by morning glories. Six of the 7 injuries from sparklers occurred among victims aged 6 years or younger. Two of the 3 victims who were ultimately admitted to hospitals were injured by homemade "fireworks"; 1 by a pipe bomb, and 1 by gasoline ignited in a coffee can.*

**IPCP also received data on fireworks-related injuries treated by the EMS departments of Honolulu and Hawaii County over this time period. This data was cross-matched against that from EDs to avoid the double-counting of injuries. There were only 3 EMS-attended injuries that were not also reported by EDs: 1 fireworks-related injury, and 2 smoke inhalation cases.*

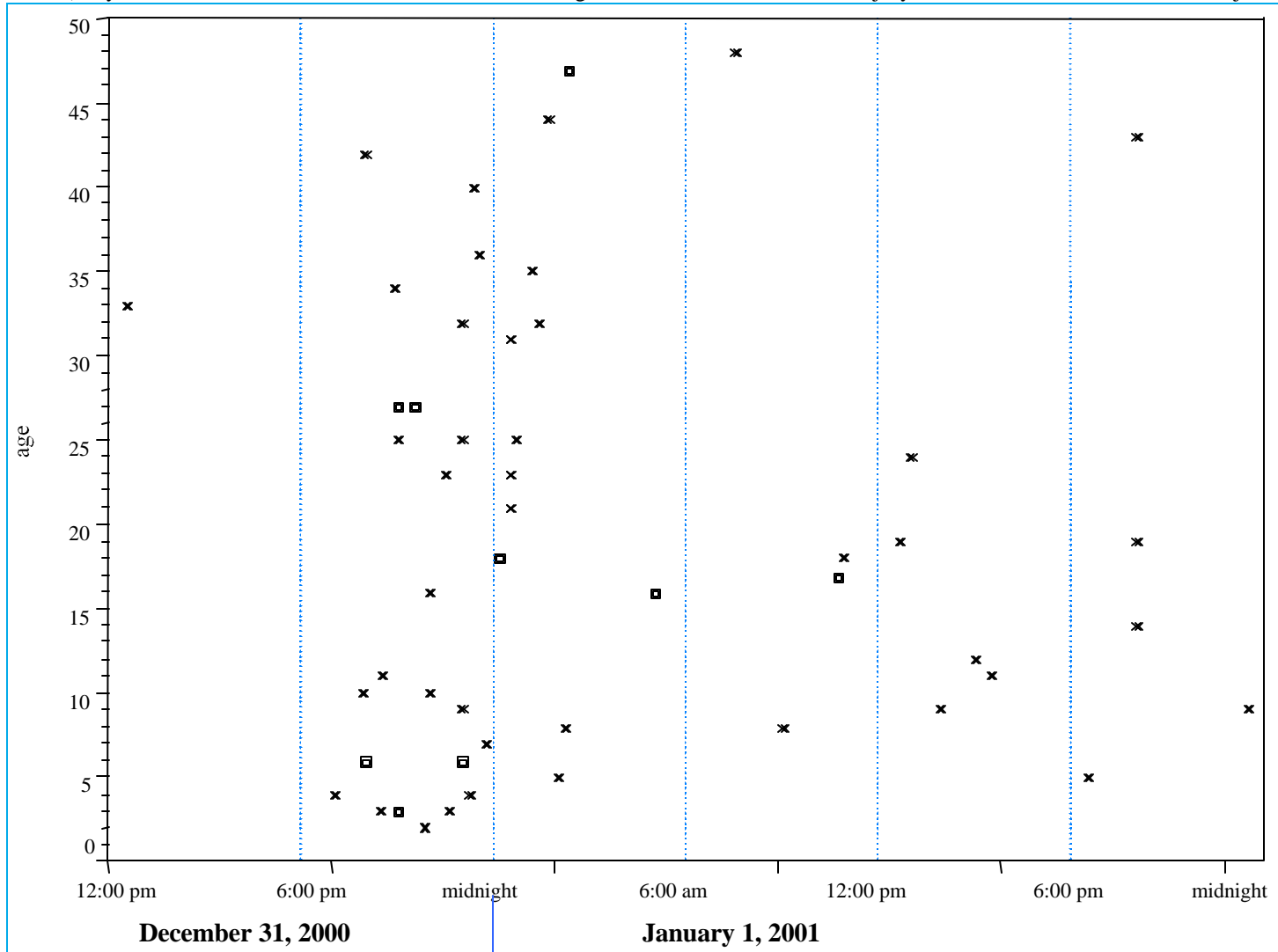
**The graph on the following page shows that approximately two-thirds of the injuries occurred during the 6-hour period of 8:00 pm on December 31, 2000 and 2:00 am on January 1, 2001. Note that nearly all of the injuries to victims aged 20 years or older occurred during this 6-hour period, while injuries to younger victims continued to occur over the following 24 hours.*

Fireworks-related injuries in Hawaii, December 31, 2000 through January 1, 2001.

Victim age and gender by date and time.

(Victim age is shown on the vertical axis. Male victims are indicated by an "x", females by open squares.)

(Fifty-one of the 59 victims are indicated, not including 7 victims for whom time of injury was not known, and 1 who was injured on 12/30/2000.)



**Number of fireworks-related injuries treated at hospital emergency departments,
December 30, 2000 to January 2, 2001.**

(Excludes inhalation injuries. Blank space indicates no report was made to either IPCP or HCAH.)

County	Facility	Reported to IPCP*	HCAH[#]
Honolulu	Castle Medical Center	4	
	Kahuku Hospital		
	Kapiolani MC for Women and Children	4	
	Kapiolani MC at Pali Momi	8	
	Kaiser Medical Center	8	
	Kuakini Medical Center	2	
	St. Francis-Liliha	0	
	St. Francis-West	8	
	Straub Clinic and Hospital	2	
	Queen's Medical Center	3	
	Tripler Army Medical Center	2	
	Wahiawa General Hospital	2	
Hawaii	Hale Ho'ola Hamakua (never sent)		
	Hilo Medical Center	6	
	Ka'u Hospital		
	Kohala Hospital	0	
	Kona Community Hospital	1	
	North Hawaii Community Hospital	3	
Maui	Kula Hospital		0
	Maui Memorial Hospital	4	
	Lanai Community Hospital		0
	Molokai General Hospital	1	
Kauai	Kauai Veterans Memorial Hospital	0	
	Samuel Mahelona Memorial Hospital		0
	Wilcox Memorial Hospital	1	
total		59	

*IPCP=Injury Prevention and Control Program, Hawaii Department of Health. Injuries reported to IPCP include information on the age and gender of the victim, and other circumstances of the injury.

[#]HCAH=Health Care Association of Hawaii. Includes only a count of the injuries treated by that hospital.